



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/642,764	08/19/2003	Katsuki Hazama	21737-00013-US2	3736

30678 7590 09/06/2005

CONNOLLY BOVE LODGE & HUTZ LLP
SUITE 800
1990 M STREET NW
WASHINGTON, DC 20036-3425

EXAMINER

TRUONG, BAO Q

ART UNIT	PAPER NUMBER
----------	--------------

2187

DATE MAILED: 09/06/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/642,764

Applicant(s)

HAZAMA, KATSUKI

Examiner

Bao Q. Truong

Art Unit

2187

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 19 August 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 16,17,22 and 23 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 16,17,22 and 23 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 19 August 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☒ Certified copies of the priority documents have been received in Application No. 08/931,519.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date <u>08/19/2003</u> . | 6) <input type="checkbox"/> Other: _____ |

Art Unit: 2187

1. The instant application having Application No. 10/642,764 has a total of 4 claims pending in the application; there are 2 independent claims and 2 dependent claims, all of which are ready for examination by the examiner.

Oath/Declaration

2. The applicant's oath/declaration has been reviewed by the examiner and is found to conform to the requirements prescribed in 37 C.F.R. § 1.63.

Priority

3. Acknowledgment is made of applicant's claim for foreign priority based on applications filed in Japan on 18 September 1996 and 06 December 1996. It is noted that applicant has filed certified copies of the JP-267844/1996 and JP-342663/1996 applications as required by 35 U.S.C. 119(b) in parent Application No. 08/931,519 filed on 16 September 1997.

Information Disclosure Statement

4. As required by M.P.E.P § 609 (C), the applicant's submission of the Information Disclosure Statement, dated on 19 August 2003, is acknowledged by the examiner; and the cited reference has been considered in the examination of the claims now pending. As required by M.P.E.P § 609 C (2), a copy of the PTO-1449 initialed and dated by the examiner is attached to the instant office action.

Drawings

5. The applicant's drawings submitted are acceptable for examination purposes.

Specification

6. Applicant is reminded of the proper language and format for an abstract of the disclosure.

The abstract should be in narrative form and generally limited to a single paragraph on a separate sheet within the range of 50 to 150 words. It is important that the abstract not exceed 150 words in length since the space provided for the abstract on the computer tape used by the printer is limited. The form and legal phraseology often used in patent claims, such as "means" and "said," should be avoided. The abstract should describe the disclosure sufficiently to assist readers in deciding whether there is a need for consulting the full patent text for details.

The language should be clear and concise and should not repeat information given in the title. It should avoid using phrases which can be implied, such as, "The disclosure concerns," "The disclosure defined by this invention," "The disclosure describes," etc.

7. The abstract of the disclosure is objected to because it is not within the range of 50 to 150 words. Correction is required. See MPEP § 608.01(b).

Double Patenting

8. The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. See *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and, *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent is shown to be commonly owned with this application. See 37 CFR 1.130(b).

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

9. Claims 16-17 and 22-23 are rejected under the judicially created doctrine of double patenting over claims 7-10 of U. S. Patent No. 6,853,581 B2 since the claims, if allowed, would improperly extend the "right to exclude" already granted in the patent.

The subject matter claimed in the instant application is fully disclosed in the patent and is covered by the patent since the patent and the application are claiming common subject matter.

Claim 16 of Present Application	Claim 7 of U.S. 6,853,581 B2
<p>A method for reading n ($n \geq 2$) number of bits (X_1, X_2, \dots, X_n) from a plurality of multilevel memory cells arranged so as to correspond to a physical address space, each cell having at least one transistor, each cell storing 2^n levels of data each expressed by the bits (X_1, X_2, \dots, X_n), comprising the steps of:</p> <p>converting a logical address into a physical address included in the physical address space;</p> <p>judging whether a logical address space including the logical address matches the physical address space;</p> <p>specifying the most significant bit X_1 by applying a predetermined reference voltage to a gate of the transistor to determine whether a current flows between a source and a drain of the transistor when the logical address space matches the physical address space; and</p> <p>outputting the specified bit from one of the cells corresponding to the physical address.</p>	<p>A method for reading n ($n \geq 2$) number of bits (X_1, X_2, \dots, X_n) from a plurality of multilevel memory cells arranged so as to correspond to a physical address space, each cell storing 2^n levels of data each expressed by the bits (X_1, X_2, \dots, X_n), comprising the steps of:</p> <p>converting a logical address into a physical address included in the physical address space;</p> <p>judging whether a logical address space including the logical address matches the physical address space;</p> <p>specifying the most significant bit X_1, by one time specifying operation, by means of a reference value when judged that the logical address space matches the physical address space; and</p> <p>outputting the specified bit from one of the cells corresponding to the physical address.</p>

According to figures 8-9 and column 15: line 54 through column 18: line 37 of U.S. 6,853,581 B2, the **one time specifying operation** comprises **applying a predetermined reference voltage to a gate of the transistor to determine whether a current flows between a source and a drain of the transistor** (see figure 8: step S5; figure 9: element 3b; and column 16: lines 20-38) when the logical address space matches the physical address space (see figure 8: step S3-S4). Therefore, the subject matter claimed in the instant application is fully disclosed in the patent and is covered by the patent since the patent and the application are claiming common subject matter.

Claim 17 of the application is disclosed and covered by claim 8 of U.S. 6,853,581 B2.

Claim 22 of the application is disclosed and covered by claim 9 of U.S. 6,853,581 B2.

Claim 23 of the application is disclosed and covered by claim 10 of U.S. 6,853,581 B2.

Furthermore, there is no apparent reason why applicant was prevented from presenting claims corresponding to those of the instant application during prosecution of the application which matured into a patent. See *In re Schneller*, 397 F.2d 350, 158 USPQ 210 (CCPA 1968). See also MPEP § 804.

Art Unit: 2187

Conclusion

10. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. See Form PTO-892.

U.S. 6,895,543 B2 and U.S. 5,844,841 disclose read/write method for multilevel memories.

11. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Bao Q Truong whose telephone number is (571) 272-4202. The examiner can normally be reached on Monday-Friday from 7:00 AM to 4:00 PM (ET).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Donald A Sparks, can be reached on (571) 272-4201. The fax phone number for the organization where this application or proceeding is assigned is (571) 273-8300.

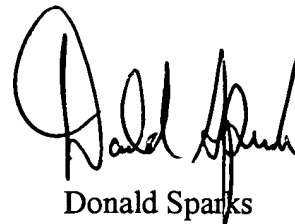
Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (571) 272-2100.

Bao Q Truong

BT

Patent Examiner

29 August 2005



Donald Sparks

Supervisory Patent Examiner

Technology Center 2100